



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,697	02/08/2002	Andre D. Cropper	83708THC	2090
7590		06/08/2007		
Thomas H. Close Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201				
			EXAMINER TUROCY, DAVID P	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 06/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/071,697	Applicant(s) CROPPER ET AL.	
	Examiner David Turocy	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 2,5,6 and 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/23/07 has been entered.

Response to Amendment

2. Applicant's amendments, filed 4/23/07, have been fully considered and reviewed by the examiner. Also, the examiner notes the amendment to claim 1. Claims 1-11 remain pending in the instant application, with claims 2, 5-6, and 9-11 withdrawn due to a restriction requirement.

Response to Arguments

3. Applicant's arguments filed 4/23/07 have been fully considered but they are not persuasive.

The examiner notes the statement of common ownership at the time the invention was made and therefore the 35 USC 103(a) rejections over US Patent 6814642 by Siwinski et al. and US Patent 6424094 by Feldman et al. have been withdrawn.

Art Unit: 1762

The applicant has argued against the Umemoto reference stating the reference requires deformation of the LCD and therefore the substituted OLED must be deformed, which would cause damage to the OLED organic layers and electrodes. No factual evidence is supplied to support the position that OLED's are incapable of being flexible and therefore the argument is deemed moot.

The applicant has argued against the Umemoto reference stating that the reference fails to disclose 150°C coating technique. The examiner does not disagree. However, the examiner maintains the position that the process parameter of temperature is a known result effective variable. If temperature were too low it would result in improper coating and too high a temperature would result in detriment to the substrate. Therefore it would have been obvious to one skill in the art at the time of the invention was made to determine the optimal value for the temperature of deposition used in the process of '432 in view of '604, '316 and '200 through routine experimentation, to effectively deposit the resistive film without effecting the already deposited layers. *Also the examiner notes that '200 discloses coating using spin coating and, as evidenced by the applicant's specification, at paragraph 0015, spin coating is known in the art as a low temperature coating.*

All other arguments by the applicant are directed to newly added limitations that were not present in the previously rejected claims and therefore such arguments are deemed moot and will be addressed in the rejections to follow.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3-4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6982432 by Umemoto et al, hereafter '432 in view of US Patent Publication 2001/0046604 by Geaghan, hereafter '604, US Patent 6819316 by Schulz et al, hereafter '316, and US Patent 6534200 by Heuer et al., hereafter '200.

'432 teaches a method for forming an integrated LCD and touch screen, wherein the touch screen includes a resistive film (figures, abstract). '432 discloses providing a transparent substrate, forming a LCD display (3a) on one side of the substrate and forming a resistive film (41) using a low temperature technique on the other side of the

Art Unit: 1762

substrate and forming a resistive touch screen (4) on the resistive film (abstract, figures, Column 2, line 57-Column 3, line 40, Column 6, lines 15-20, column 7, lines 20-25).

'432 suggests forming the resistive film (41) directly on the substrate including the LCD screen (Column 6, lines 17-57).

'432 discloses forming a integrated display device with a resistive touch screen and a LCD, but fails to disclose using a OLED film. However, '604 discloses combining touch screens with a number of display devices, including LCD, CRT OLED, and plasma (0045). Therefore, taking the references collectively, it would have been obvious to one of ordinary skill in the art to form a OLED in the process of '432 with a reasonable expectation of success because '604 discloses touch screens are known to be used with OLEDs. The prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375.

'432 discloses that it is known and suitable in the art to provide a transmissive touch screen, wherein the touch screen is disposed on the visual side of the display panel, which emits light through a transparent substrate as well as through a transparent resistive film (see figure 6, column 1, lines 17-43). While the examiner notes '432 discloses such an arrangement provides issues with glaring, at column 1, lines 45-55, '432 clearly discloses such an arrangement is known and suitable in the art to provide an effective and operable touch screen on a display device. However, '432 in view of '604 fails to explicitly disclose forming a resistive touch screen on the display side of an OLED, however, '316 discloses that it is known and suitable in the art to have

Art Unit: 1762

a touch screen on the display side of an OLED (Column 13, lines 15-30). Therefore, it would have been obvious to one of ordinary skill in the art to have modified '432 in view of '604 to deposit a resistive touch screen on the display side of the OLED screen with a reasonably expectation of successfully providing an OLED display with a resistive touch screen. The prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375.

'432 in view of '604 and '316 teach all the limitations of these claims as discussed above and '432 also disclose forming the resistive film by sputtering ITO, however, the references fail to teach applying a resistive polythiophene by spin coating.

'200 discloses polythiophene deposited by spin coating is a known equivalent for ITO used as transparent electrode films (Column 22, lines 1-15). Substitution of equivalents requires no express motivation. *In re Fount*, 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152, USPQ (CCPA 1967). Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify '432 in view of '604 and '316 to use a polythiophene deposited by spin coating as a transparent electrode with a reasonable expectation of success because '200 discloses polythiophene deposited by spin coating is a known and suitable electrode material for display devices and the selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

'432 in view of '604, '316 and '200 fails to explicitly disclose spin coating at a temperature less than 150°C. However, it is the examiners position that the process parameter of temperature is a known result effective variable. If temperature were too low it would result in improper coating and too high a temperature would result in detriment to the substrate. Therefore it would have been obvious to one skill in the art at the time of the invention was made to determine the optimal value for the temperature of deposition used in the process of '432 in view of '604, '316 and '200 through routine experimentation, to effectively deposit the resistive film without effecting the already deposited layers. Additionally, as evidenced by the applicant's specification, at paragraph 0015, spin coating is known in the art as a low temperature coating.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over '432 in view of '604, '316 and '200 and further in view of US Patent 6229506 by Dawson et al., hereafter '506.

'432 in view of '604, '316 and '200 are applied here for all the same reasons as applied above, however, the references fail to disclose providing an active matrix display, however, '506 discloses an active matrix display is known and suitable for OLED film and using an active matrix display only illuminates the for the pixels that are activated, thereby conserving energy and power (Column 1).

Therefore, it would have been obvious to one of ordinary skill in the art to modify '432 in view of '604, '316 and '200 to use an active matrix display with a reasonable expectation of success to reap the benefits of providing a display with reduced power consumption because '506 discloses active matrix displays are known and suitable for use with OLED films.

Conclusion

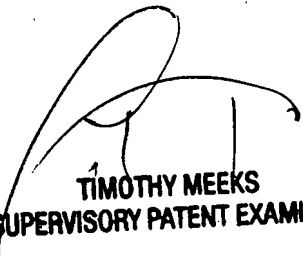
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

Art Unit: 1762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Turocy/
AU 1762



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER